IN THE CLAIMS

Claims 1-6, 15, 16, and 19-26 are pending in this application. Please amend claims 1, 15, 16, 19, and 20 as follows:

1. (Currently Amended) A disk-shaped information recording medium on which a user data area and a control data area are formed, and to which information is recorded or from which recorded information is produced by irradiation with an energy beam moving on/along a track relative to said medium,

wherein a first location is in an innermost area of the user data area and a second location is in an outermost area of the user data area,

wherein data concerning a maximum linear velocity at the first location (V1max) and a minimum linear velocity at the first location (V1min) that are defined according to the recording medium and a maximum linear velocity at the second location (V2max) and a minimum linear velocity at the second location (V2min) that are defined according to the recording medium are recorded at a predetermined area of the disk-shaped information recording medium.

2. (Previously Presented) A disk-shaped information recording medium according to claim 1,

wherein said predetermined area lies in a control data zone in which data concerning said medium are recorded.

3. (Previously Presented) A disk-shaped information recording medium according to claim 1,

wherein at least one of undermentioned conditions is satisfied:

$r1 < r2$, and

$V1max < V2max$ or

$V1min < V2min$

where r1 represents a radial distance of said first location from a center of said medium and

r2 represents a radial distance of said second location from said center of said medium.

4. (Previously Presented) A disk-shaped information recording medium according to claim 3,

wherein conditions that r1 < r2 and that V1min/r1 < V2max/r2 are satisfied,

where r1 represents a radial distance of said first location from a center of said medium and

r2 represents a radial distance of said second location from said center of said medium.

5. (Previously Presented) A disk-shaped information recording medium according to claim 3,

wherein condition that V1max < V2min is additionally satisfied.

6. (Previously Presented) A disk-shaped information recording medium according to claim 1,

wherein at least some of recording/reproducing conditions corresponding to said maximum linear velocities (Vmax) and said minimum linear velocities (Vmin) at said first and second locations, respectively, are recorded at said predetermined location.

7-14. (Canceled)

15. (Currently Amended) An information recording method of recording information on disk-shaped information recording medium, in which a user data area and a control area are formed, by irradiation with an energy beam moving on/along a track relative to said medium,

said method comprising the steps of:

using a recording medium such that data concerning a maximum linear velocity (V1max) and a minimum linear velocity (V1min) at a first location in an innermost area of the user data area and a maximum linear velocity (V2max) and a minimum linear velocity (V2min) at a second location in an outermost area of the user data area is recorded at a predetermined area, the maximum linear velocity (V1max), the minimum linear velocity (V1min), the maximum linear velocity (V2max), and the minimum linear velocity (V2min) being defined according to the recording medium;

reading said data prior to recording operation of information recorded in the user data area; and

recording the information to the user data area with a relative speed between said medium and said energy beam, which is controlled on the basis of said data.

16. (Currently Amended) An information reproducing method of reproducing information from a disk-shaped information recording medium, in which a user data area and a controlling area formed, by irradiation with an energy beam moving on/along a track relative to said medium,

said method comprising the steps of:

using a recording medium such that data concerning a maximum linear velocity (V1max) and a minimum linear velocity (V1min) at a first location in an innermost area of the user data area and a maximum linear velocity (V2max) and a minimum linear velocity (V2min) at a second location in an outermost area of the user data is recorded at a predetermined area, the maximum linear velocity (V1max), the minimum linear velocity (V1min), the maximum linear velocity (V2max), and the minimum linear velocity (V2min) being defined according to the recording medium;

reading said data prior to recording operation of information recorded in the user data area; and

reproducing the information recorded in the user data area with a relative speed between said medium and said energy beam, which is controlled on the basis of said data.

17-18. (Canceled)

19. (Currently Amended) An information recording method according to claim 15, wherein [[the]] a predetermined control mode of the disk-shaped information recording medium includes a recording condition for the disk-shaped information recording medium with a predetermined performance.

20. (Currently Amended) An information recording method according to claim 16, wherein [[the]] a predetermined control mode of the disk-shaped information

recording medium includes a recording condition for the disk-shaped information recording medium with a predetermined performance.

21. (Previously Presented) An information recording method, according to claim 15,

wherein said relative speed is controlled by one of a control method selected from a group consisting of:

a constant angular velocity (CAV) control with a rotation speed (rpm) being constant,

a constant linear velocity (CLV) control with a linear velocity being constant,

and

a combination of said constant angular velocity (CAV) control and said constant linear velocity (CLV) control.

22. (Previously Presented) An information recording method according to claim 15,

wherein the linear velocities at other locations than said first and second locations are determined through linear interpolation between said minimum linear velocity (V1min) at said first location and said minimum linear velocity (V2min) at said second location and between said maximum linear velocity (V1max) at said first location and said maximum linear velocity (V2max) at said second location.

23. (Previously Presented) An information recording method according to claim 15,

wherein said information recording medium includes a reflective laver, of which thickness is gradually decreased from a radially inner side of said medium toward a radially outer side of said medium, and

wherein a constant angular velocity (CAV) control is adopted for controlling a rotation of said medium.

24. (Previously Presented) An information reproducing method, according to claim 16,

wherein said relative speed is controlled by one of a control method selected from a group consisting of:

a constant angular velocity (CAV) control with a rotation speed (rpm) being constant,

a constant linear velocity (CLV) control with a linear velocity being constant,

and

a combination of said constant angular velocity (CAV) control and said constant linear velocity (CLV) control.

25. (Previously Presented) An information reproducing method according to claim 16,

wherein the linear velocities at other locations than said first and second locations are determined through a linear interpolation between said minimum linear velocity (V1min) at said first location and said minimum linear velocity (V2min) at said second location and between said maximum linear velocity (V1max) at said first location and said maximum linear velocity (V2max) at said second location.

26. (Previously Presented) An information reproducing method according to claim 16,

wherein said information recording medium includes a reflective laver, of which thickness is gradually decreased from a radially inner side of said medium toward a radially outer side of said medium, and

wherein a constant angular velocity (CAV) control is adopted for controlling a rotation of said medium.